

In the Claims:

1. (Original) A chip-device for holding living cells, the device comprising a carrier having a plurality of wells disposed on a surface each well configured to hold at least one living cell, the device characterized in that said wells are configured to influence the proliferation of living cells held in said wells.

2. (Original) The device of claim 1, wherein the inside of said wells comprises a material selected from the group consisting of a gel, a hydrogel, polydimethylsiloxane, an elastomer, polymerized para-xylylene molecules, polymerized derivatives of para-xylylene molecules and silicon rubber.

3. (Original) The device of claim 1, wherein said carrier is substantially made of a material selected from the group consisting of a gel, a hydrogel, polydimethylsiloxane, an elastomer and silicon rubber.

4. (Original) The device of claim 1, wherein said influence is predetermined.

5. (Original) The device of claim 1, wherein said configuration is at least one feature from amongst the six features:

- (a) the inside of said wells is configured to delay cell proliferation;
- (b) the inside of said wells is configured to inhibit cell proliferation;
- (c) said wells are configured to allow cell proliferation inside at least one component of said chip-device;
- (e) the inside of said wells is configured to delay adhesion of living cells thereto;
- (f) the inside of said wells is configured to inhibit adhesion of living cells thereto; and
- (g) the size of said wells is changeable.

6. (Original) The device of claim 5, wherein the size of said wells is changeable.

7. (Original) The device of claim 6, said carrier configured to be deformable in at least one dimension and that upon deformation the size of at least one of said wells is changed.

8-11. (Canceled)

12. (Original) The device of claim 1, said carrier is substantially of a material having an index of refraction similar to that of water.

13. (Original) The device of claim 12, said carrier is of a material having an index of refraction less than about 1.4.

14-17. (Canceled)

18. (Original) The device of claim 1, having at least one component made of a gel.

19-21. (Canceled)

22. The device of claim 18, wherein the water content of said gel is greater than about 80% by weight.

23-26. (Canceled)

27. (Original) The device of claim 18, wherein said gel comprises an active entity.

28. (Canceled)

29. (Original) The device of claim 18, wherein said carrier is made of said gel.

30. (Original) The device of claim 18, wherein a cover for said surface is made of said gel.

31-34. (Canceled)

35. (Original) The device of claim 1, wherein the inside of said wells is configured to delay adhesion of living cells thereto.

36-41. (Canceled)

42. (Original) The device of claim 1, wherein said wells are juxtaposed.

43. (Original) The device of claim 42, the interwell area between two said wells is less than about 0.35 the sum of the areas of said two wells.

44-47. (Canceled)

48. (Original) The device of claim 42, wherein a rim of a said well is substantially knife-edged.

49. (Original) The device of claim 1, wherein the dimensions of said wells are less than about 200 microns.

50-55. (Canceled)

56. The device of claim 1, wherein said wells are enclosures of dimensions such that substantially an entire cell of a certain type is containable within a said enclosure, each said enclosure having an opening at said surface, said opening defined by a first cross section of a size allowing passage of a cell of said certain type.

57-67. (Canceled)

68. (Original) The device of claim 1, further comprising protuberances protruding from said surface between two adjacent wells.

69-73. (Canceled)

74. (Original) The device of claim 1, further comprising at least one wall protruding from said surface, said at least one wall circumscribing at least one area of said surface where the points of the top edge of said wall define a plane.

75-79. (Canceled)

80. (Original) A gel carrier, the carrier having a plurality of wells disposed on a surface each well configured to hold at least one living cell.

81. (Original) A polydimethylsiloxane carrier, the carrier having a plurality of wells disposed on a surface each well configured to hold at least one living cell.

82. (Canceled)

83. (Original) A carrier comprising a first layer of a first material resting on top of a second layer of a second material, the carrier having a plurality of wells disposed on an upper surface of said first layer each of said plurality of wells configured to hold at least one living cell, wherein the bottom of said plurality of wells is said second layer.

84-85. (Canceled)

86. (Original) A carrier comprising a plurality of wells disposed on a surface each well configured to hold at least one living cell, the carrier characterized in that bottoms of said wells are flat.

87-89. (Canceled)

90. (Original) A chip-device for holding living cells, the device comprising a carrier having a plurality of wells disposed on a surface each well configured to hold at least one living cell, the device characterized in that said carrier is made of a material having an index of refraction similar to that of water.

91. (Original) The device of claim 90, said carrier is of a material having an index of refraction less than about 1.4.

92-104. (Canceled)

105. (Original) A device for holding living cells, the device comprising:
(a) a well-bearing component having a plurality of wells disposed on a surface, each well configured to hold at least one living cell; and
(b) a cover covering said surface, said cover substantially made of a gel.

106-108. (Canceled)

109. (Original) The device of claim 105, wherein said gel comprises an active entity.

110. (Canceled)

111. (Original) The device of claim 105, wherein the water content of said gel is greater than about 80% by weight.

112-120. (Canceled)

121. (Original) A method of making a chip-device of claim 1 comprising:
(a) providing a template having a negative of features of said surface of said carrier;
(b) contacting said template with a precursor material so as to create said features in said precursor material; and
(c) fixing said features in said precursor material so as to fashion said carrier.

122-129. (Canceled)

130. (Original) The method of claim 121, wherein said precursor material is a plastically deformable precursor material and said fixing said features comprises separating said template from said precursor material.

131. (Canceled)

132. (Original) The method of claim 121, wherein said precursor material is an elastic precursor material.

133-138. (Canceled)

139. (Original) The method of claim 132, wherein said elastic precursor material is a gellable fluid and wherein fixing said features comprises gelling said gellable fluid.

140-144. (Canceled)

145. (Original) A method of making a chip-device of claim 1 comprising:
(a) providing a carrier having a plurality of wells disposed on a surface, each well configured to hold at least one living cell; and
(b) coating the inside of said wells with a layer of a material configured to influence proliferation of living cells held in said wells.

146-152. (Canceled)

153. (Original) A method of manipulating cells, comprising:
(a) providing a plurality of wells of a well-bearing component, each well configured to hold at least one living cell;
(b) holding a plurality of living cells in a plurality of said wells;
(c) placing a gellable fluid in proximity with said surface so as to fill said plurality of wells; and
(d) gelling said gellable fluid so as to form a gel cover.

154. (Canceled)

155. (Original) The method of claim 153, wherein said well-bearing component is a carrier of claim 1.

156. (Original) The method of claim 155, wherein said carrier is substantially made of a gel.

157-177. (Canceled)

178. (Original) The method of claim 153, further comprising:

(e) subsequent to (d), isolating at least one cell by excising said at least one said cell from said well-bearing component.

179. (Original) The method of claim 153, wherein said gellable fluid comprises an active entity.

180. (Canceled)

181. (Original) The method of claim 153, further comprising:

(e) subsequent to said gelling, contacting an active entity-containing fluid with said gel cover.

182-185. (Canceled)

186. (Original) A method of growing cells comprising:

(a) providing a well-bearing device;

(b) holding at least one living cell in a well of said well-bearing device;

and

(c) increasing the size of said well so as to provide an increased space for proliferation of said cell.

187-192. (Canceled)

193. (Original) A method of collecting cells from a biological sample comprising:

(a) providing a well-bearing device, said well-bearing device having:

(i) a plurality of wells disposed on a surface, each well configured to hold at least one cell; and

(ii) a plurality of protuberances protruding from said surface

(b) contacting the biological sample with said surface so as to remove cells from the biological sample.